

**Amendments to the Claims:**

Please amend claims 1-6, 8-9 and 17-18. This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A population of primary cultured preadipocytes, wherein the preadipocytes are isolated and established from adipose tissue and stably maintain a foreign DNA encoding a protein that is secreted outside of a cell, and wherein the DNA is operably linked to a promoter sequence, ~~and wherein the population is substantially free of non-adipocyte cells.~~
2. (Currently Amended) The preadipocyte population ~~adipocyte~~ of claim 1, wherein the DNA is transferred to the cell by a retroviral vector or adeno-associated viral vector.
3. (Currently Amended) The preadipocyte population ~~adipocyte~~ of claim 1, which has the ability to significantly express the protein in vivo for at least 20 days.
4. (Currently Amended) The preadipocyte population ~~adipocyte~~ of claim 1, which is used to release the protein into the blood flow.
5. (Currently Amended) The preadipocyte population ~~adipocyte~~ of claim 1, wherein the protein is insulin or glucagon-like peptide 1 (GLP-1).
6. (Currently Amended) A method of producing a population of primary cultured preadipocytes, wherein the method comprises the steps of:
  - (1) isolating adipocytes and establishing a primary culture of preadipocytes; and
  - (2) transferring, ~~and then stably maintaining in the genome into the~~ preadipocytes a foreign DNA operably linked to a promoter sequence and encoding a protein that is secreted outside of the cell, ~~wherein the population is substantially free of non-~~

**adipocyte cells and then stably maintaining the foreign DNA in the genome of the preadipocytes.**

7. (Original) The method of claim 6, wherein the foreign gene is transferred by a retroviral vector or adeno-associated viral vector.

8. (Currently Amended) A population of primary cultured **preadipocytes**, which is produced by the method of claim 6.

9. (Currently Amended) An implant composition for gene therapy, wherein the composition comprises a population of primary cultured **preadipocytes**, which are isolated and established from adipose tissue and stably maintain in the genome a foreign DNA encoding a protein that is secreted outside of the cell, and a pharmaceutically acceptable carrier, wherein the DNA is operably linked to a promoter sequence, ~~wherein the population is substantially free of non-adipocyte cells.~~

10. (Original) The implant composition of claim 9, which further comprises an extracellular matrix component.

11. (Original) The implant composition of claim 9, which further comprises an angiogenesis factor.

12-16. (Cancelled)

17. (Currently Amended) A population of primary cultured **preadipocytes**, which is produced by the method of claim 7.

18. (Currently Amended) A population of primary cultured **preadipocytes**, wherein the **preadipocytes** are isolated and established from adipose tissue and stably maintain a foreign DNA encoding a protein that is secreted outside of a cell, wherein the DNA is operably linked to a promoter sequence, and wherein the population is obtained by ceiling culture **and substantially free of non-adipocyte cells.**

19. (Previously Presented) The method of claim 6, wherein the primary culture is established in step (1) by ceiling culture.